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(54) **ORGANIC SILANE MODIFIED OXIDE AND
MODIFIED SURFACE LIGHT PATTERNING
OXIDE**

(57) Abstract:

PURPOSE: To enable the easy reforming and patterning of the organic molecule surface-modified solid surface and enable the specified pattern arrangement of various polymer molecules by disposing an acyl alkyl sulfide organic group substituted silane monomolecular layer on the surface.

CONSTITUTION: An acyl alkyl sulfide organic group substituted silane monomolecular layer is disposed on

the surface to obtain a surface modified oxide, and the obtained surface modified oxide is irradiated by light through a mask pattern to obtain a modified surface light patterning oxide with an acyl group cleaved by light on the irradiated surface and amino polymer molecules fixed to the non-irradiated part. With this irradiation, the acyl alkyl group is cleaved by light at the irradiated part so as to form a sulfur oxide in an oxygen atmosphere, for instance, by the reaction of a formed radical. At the non-irradiated part, on the other hand, organic molecules such as protein, peptide, an amino polymer are fixed onto the pattern of the acyl alkyl group.

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